

FIG. 1

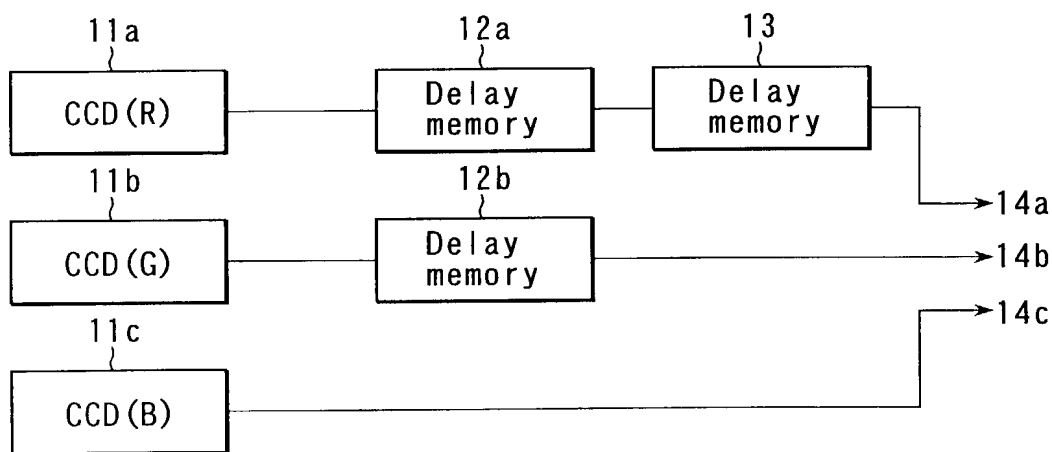
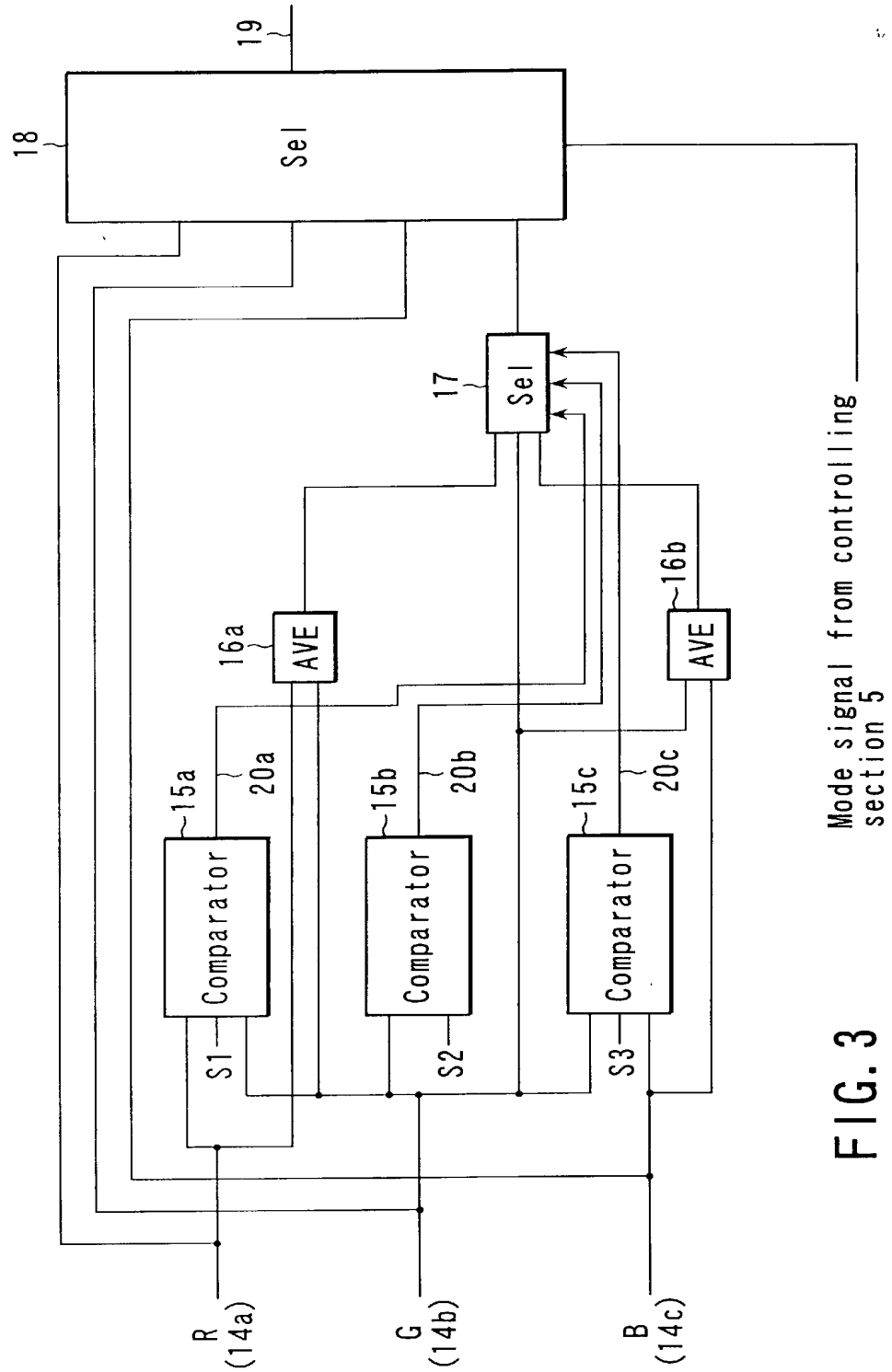


FIG. 2



Mode signal from controlling section 5

FIG. 3

Title: Image Processing Apparatus

And Image Processing Method

Inventor(s): Sunao TABATA et al.

Appl. No.: 10/054,990

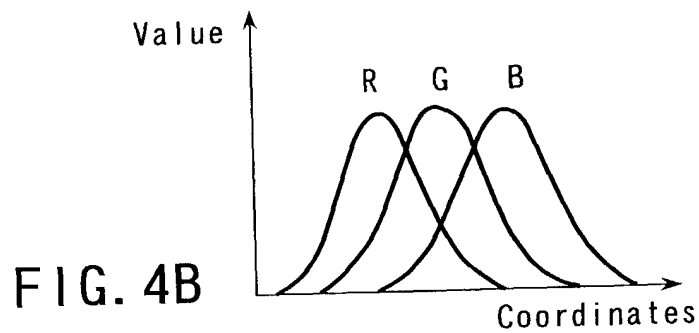
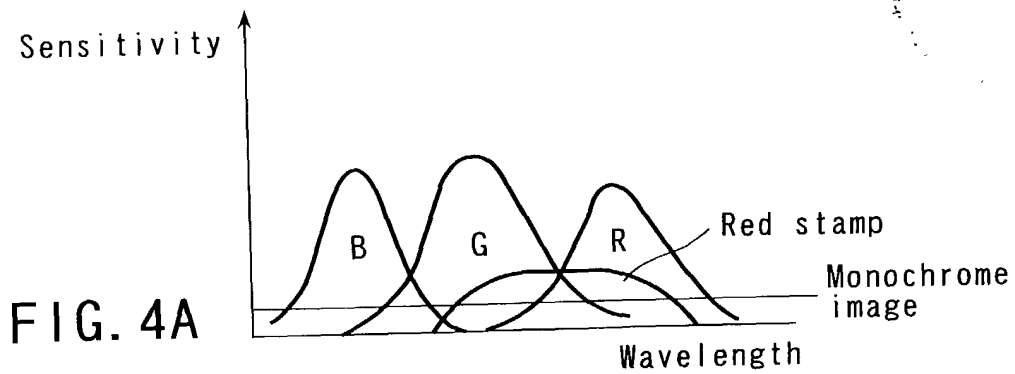
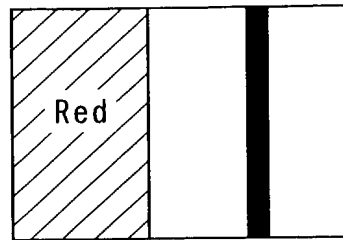


FIG. 6

Input			Output
20a	20b	20c	
0	0	0	G signal
0	0	1	Average between G and B
0	1	0	G signal
0	1	1	G signal
1	0	0	Average between R and G
1	0	1	Average between R and G
1	1	0	G signal
1	1	1	G signal

FIG. 5A



Original document

200	200	0	10	240	0
200	200	0	10	240	0
200	200	0	10	240	0

FIG. 5B R

50	50	0	0	250	0
50	50	0	0	250	0
50	50	0	0	250	0

FIG. 5C G

10	10	0	0	240	10
10	10	0	0	240	10
10	10	0	0	240	10

FIG. 5D B

50	50	0	0	250	0
50	50	0	0	250	0
50	50	0	0	250	0

Red is light FIG. 5E

87	87	0	3	243	3
87	87	0	3	243	3
87	87	0	3	243	3

Red is dark
Character deterioration

FIG. 5F

125	125	0	0	250	0
125	125	0	0	250	0
125	125	0	0	250	0

Red is dark
No character deterioration

FIG. 5G

Title: Image Processing Apparatus

And Image Processing Method

Inventor(s): Sunao TABATA et al.

Appl. No.: 10/054,990

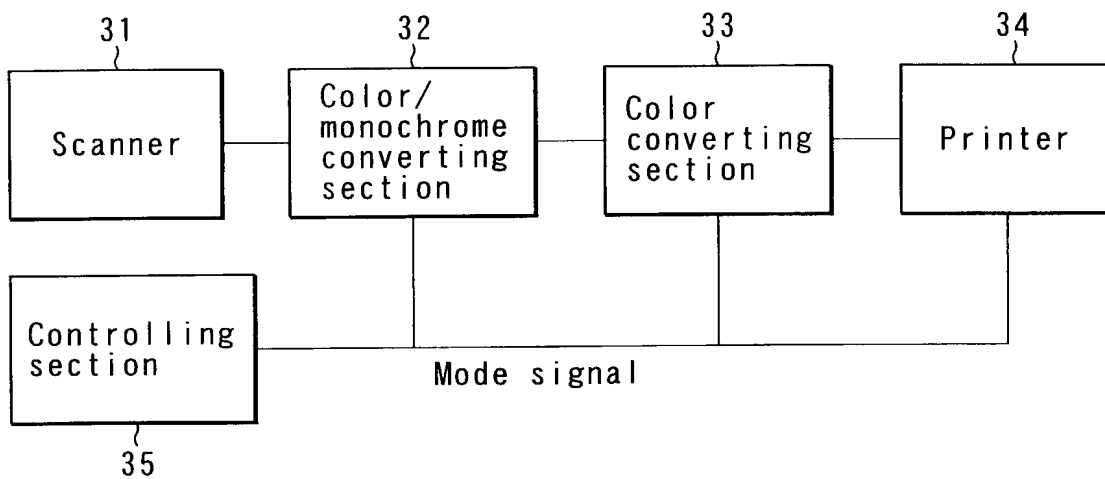


FIG. 7

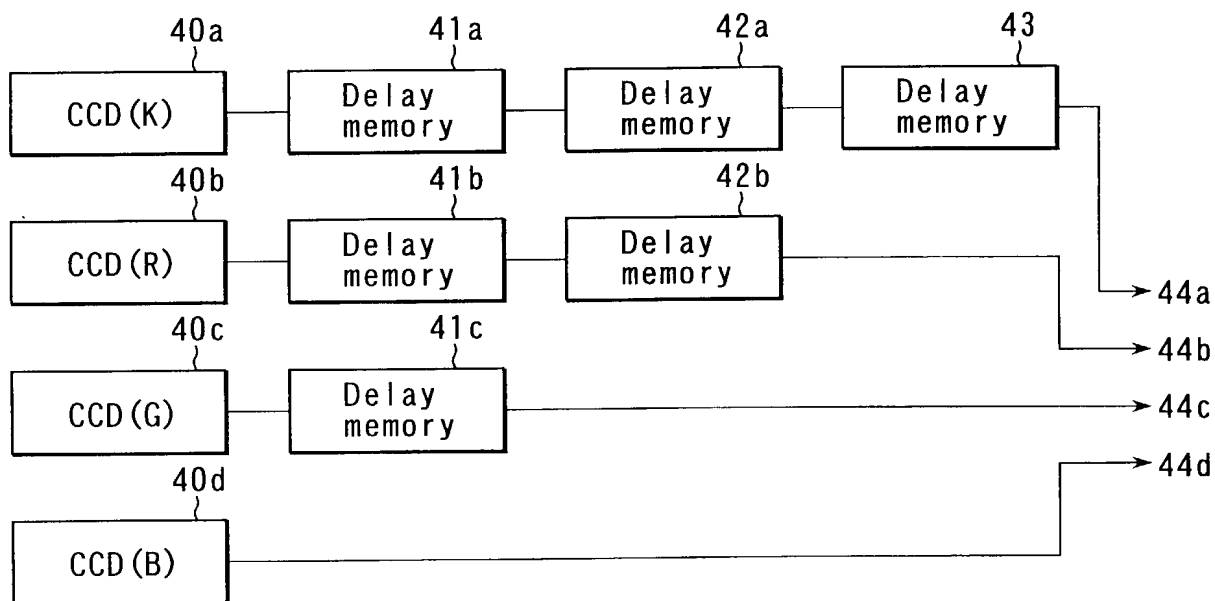


FIG. 8

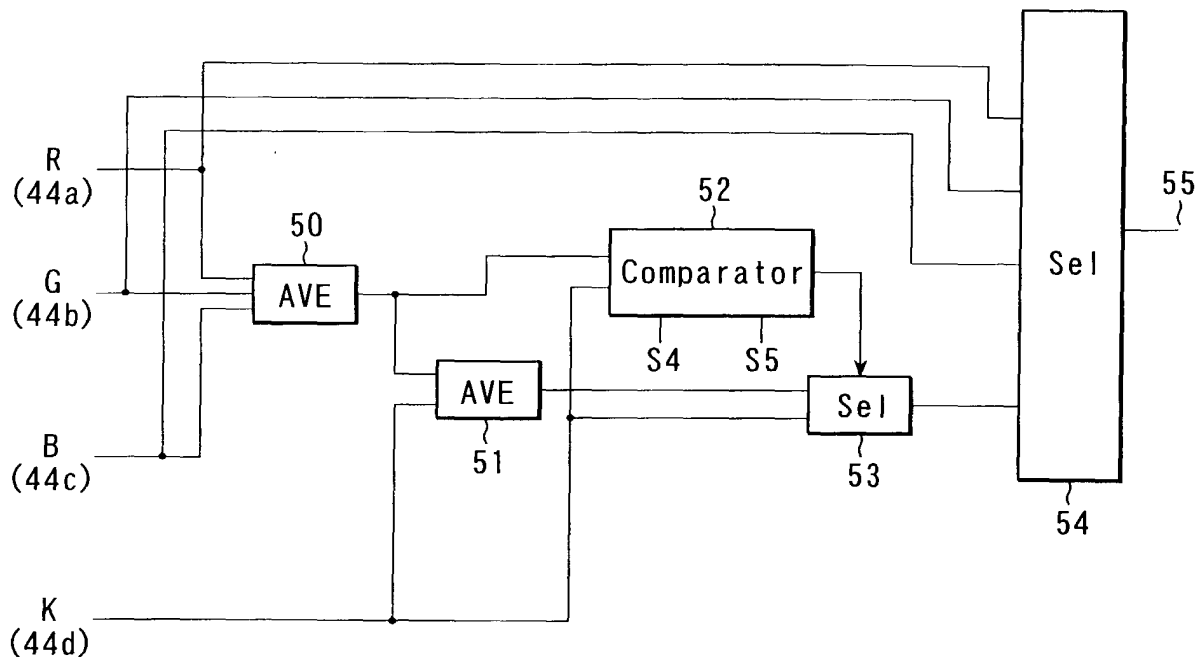


FIG. 9

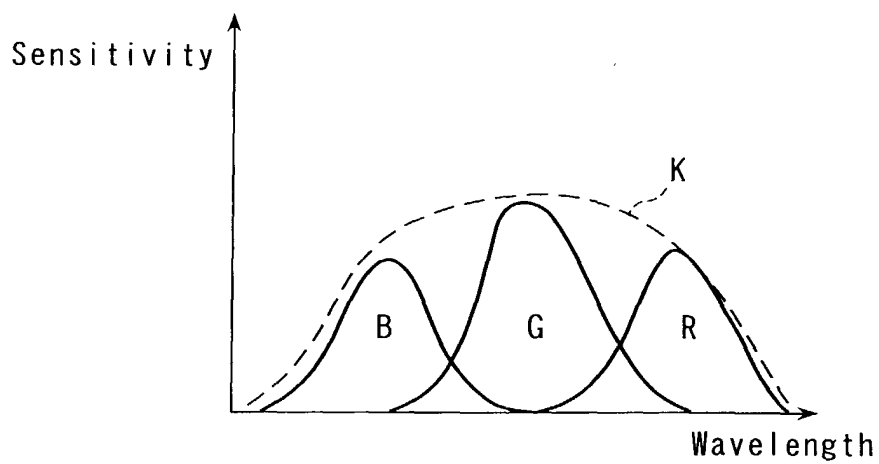


FIG. 10

RGB average	K	Output
RGB average \leq K	$K \leq S4$	K
RGB average $>$ K	$K \leq S4$	K
RGB average \leq K	$S4 < K < S5$	K
RGB average $>$ K	$S4 < K < S5$	RGB average
RGB average \leq K	$S5 \leq K$	K
RGB average $>$ K	$S5 \leq K$	K

FIG. 11

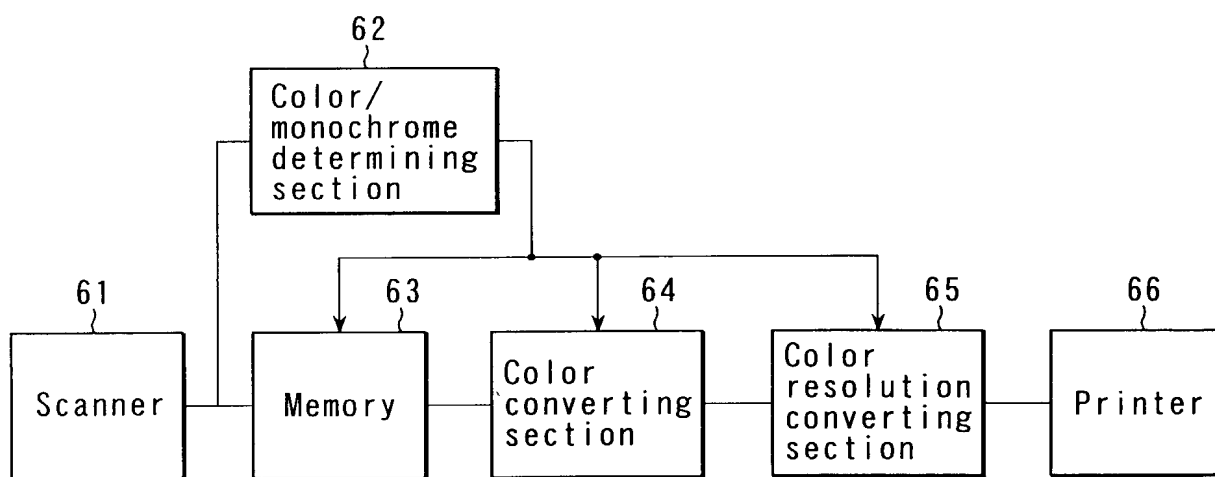
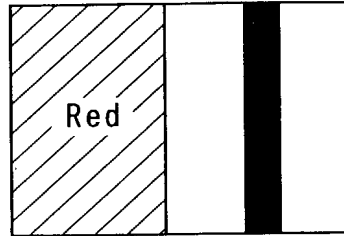


FIG. 13

FIG. 12A



Original document

200	200	0	10	240	0
200	200	0	20	240	0
200	200	0	10	240	0

R

FIG. 12B

50	50	0	0	250	0
50	50	0	0	250	0
50	50	0	0	250	0

G

FIG. 12C

10	10	0	0	240	10
10	10	0	0	240	10
10	10	0	0	240	10

B

FIG. 12D

80	60	0	0	250	0
60	60	0	0	250	0
60	60	0	0	250	0

K

FIG. 12E

60	60	0	0	250	0
60	60	0	0	250	0
60	60	0	0	250	0

Red is light

FIG. 12F

87	87	0	0	250	0
87	87	0	0	250	0
87	87	0	0	250	0

Red is dark

FIG. 12G

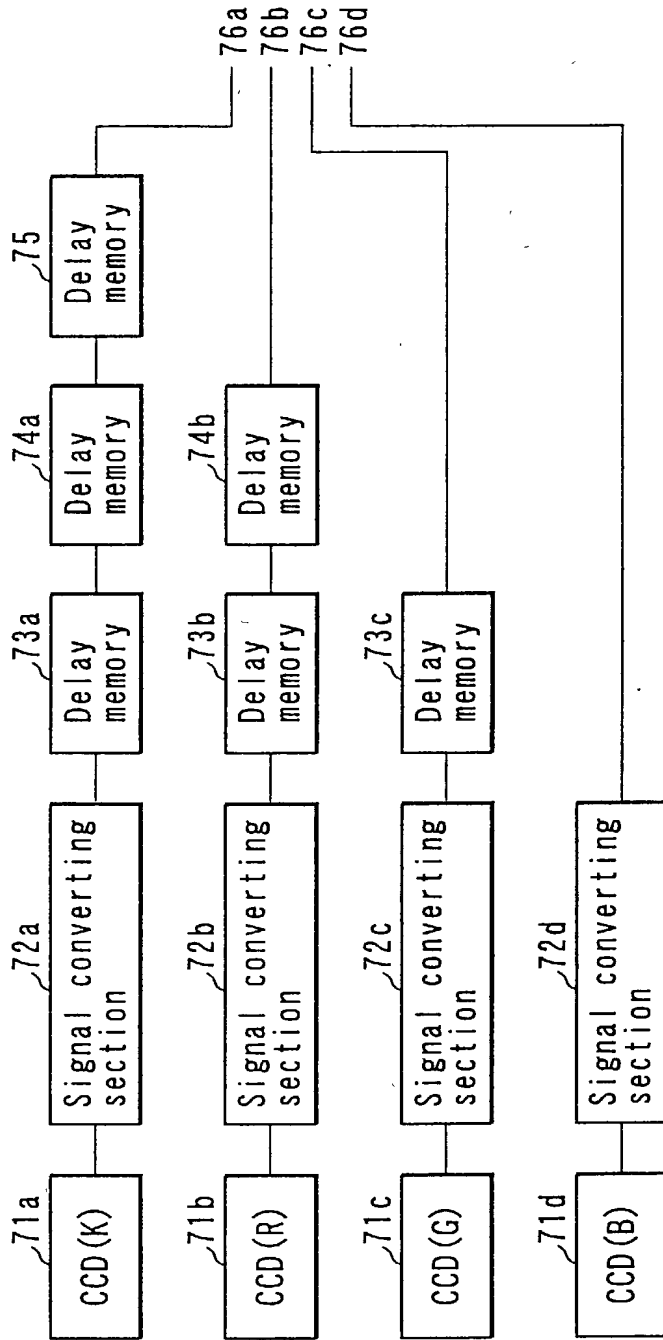


FIG. 14

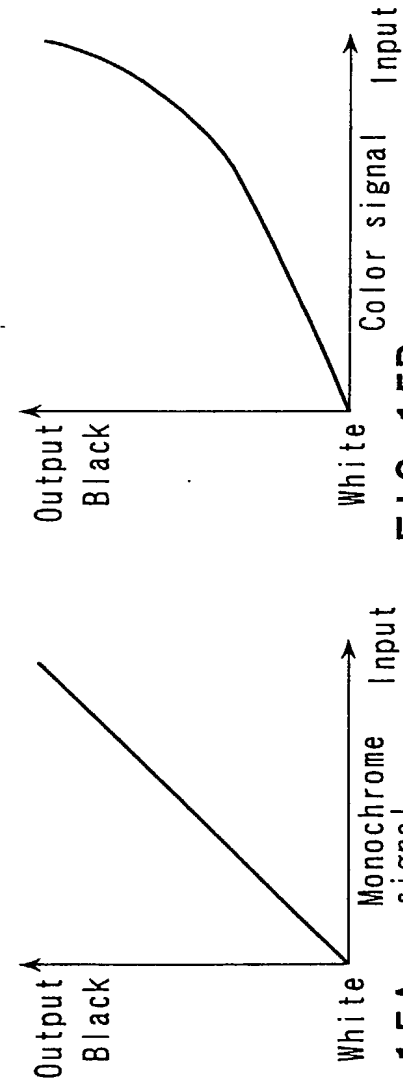


FIG. 15A

FIG. 15B

Monochrome
R
G
B
...

63

FIG. 16

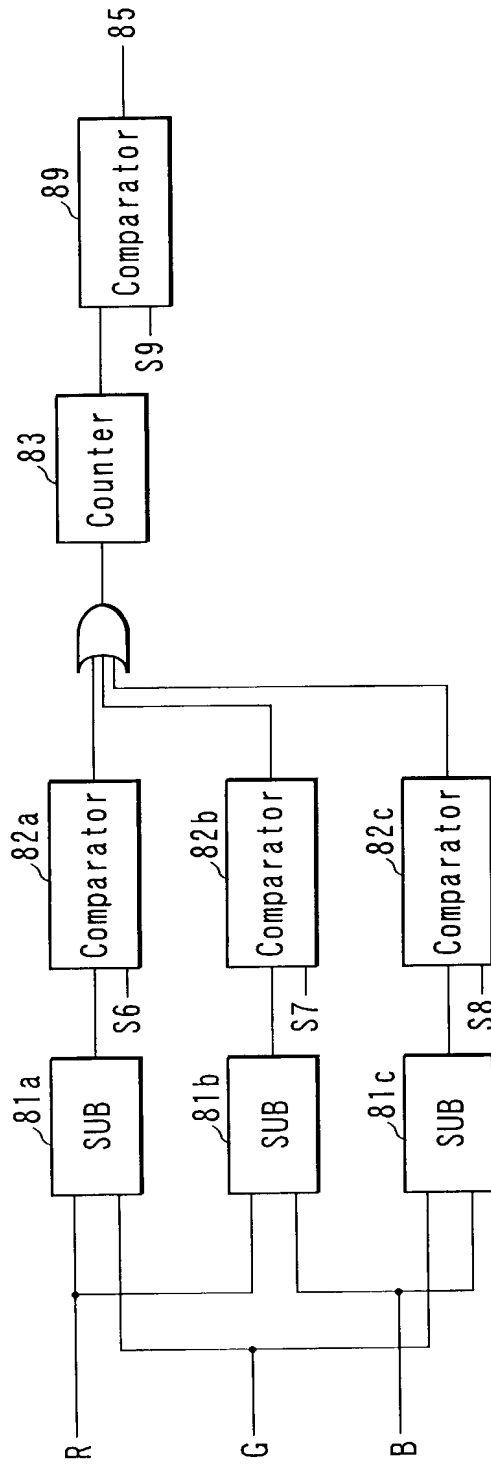


FIG. 17

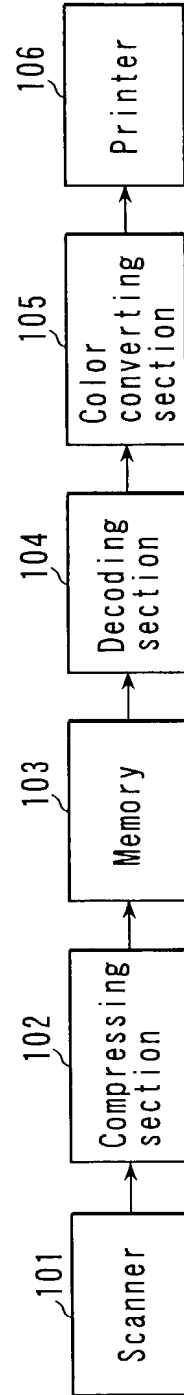


FIG. 18

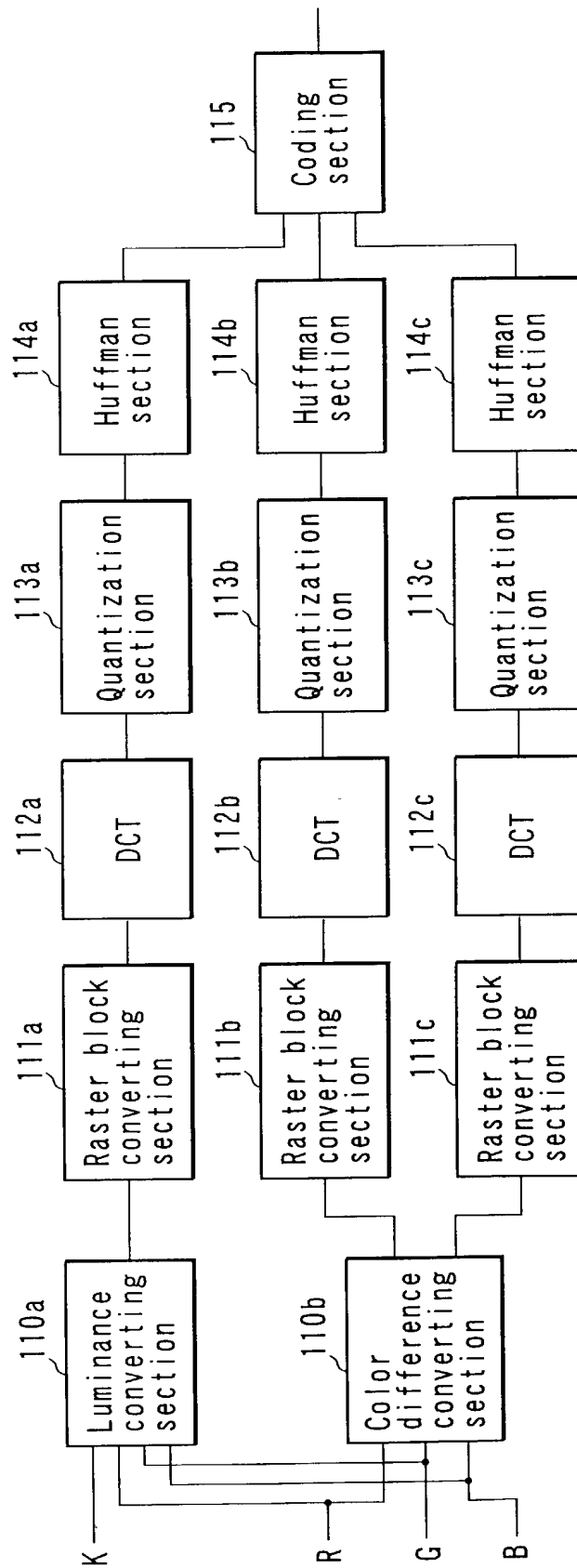


FIG. 19

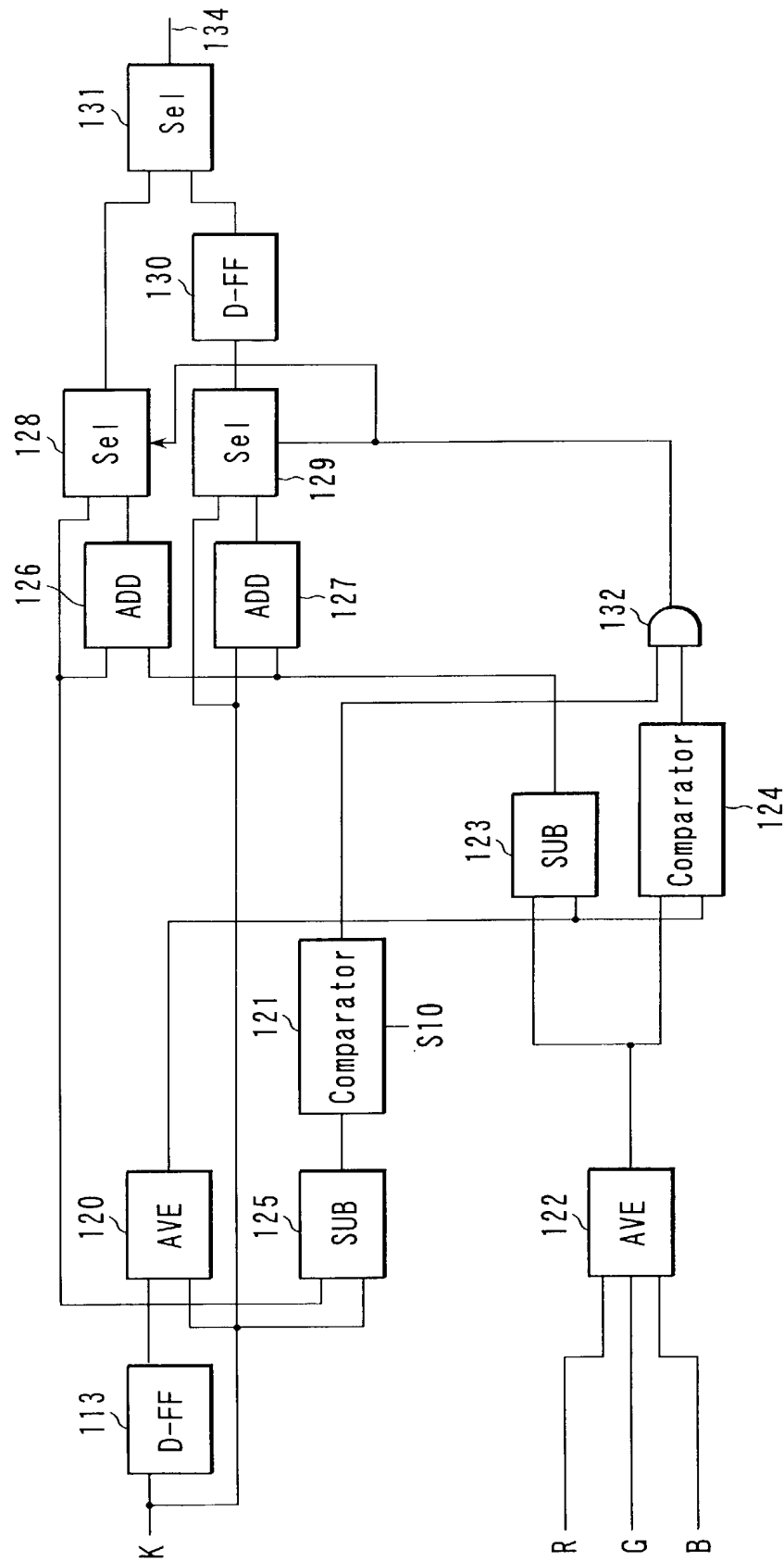
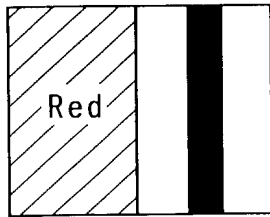


FIG. 20



Original document

FIG. 21A

200	5	120
200	5	120
200	5	120

Monochrome
resolution

FIG. 21B

50	0	125
50	0	125
50	0	125

G

FIG. 21C

10	0	125
10	0	125
10	0	125

B

FIG. 21D

58	62	0	0	250	0
58	62	0	0	250	0
58	62	0	0	250	0

K

FIG. 21E

78	1	124
78	1	124
78	1	124

RGB average

FIG. 21F

60	0	125
60	0	125
60	0	125

K average

FIG. 21G

18	1	-1
18	1	-1
18	1	-1

RGB average-K average

FIG. 21H

4	0	250
4	0	250
4	0	250

Monochrome
difference
absolute value

FIG. 21I

76	80	1	1	250	0
76	80	1	1	250	0
76	80	1	1	250	0

FIG. 21J

(RGB average-K average)+(K1,K2) (K1,K2)

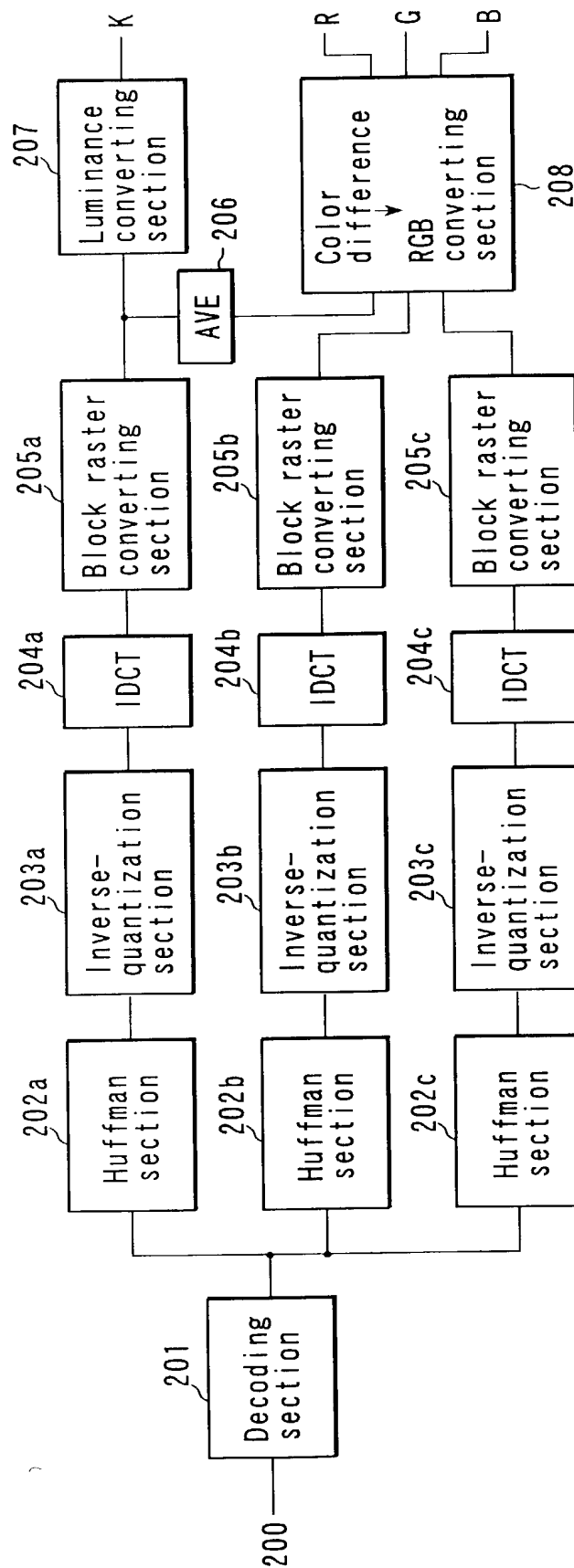


FIG. 22